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10/04/2005

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| EXAMINER |
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DUNWOODY, AARON M

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| ART UNIT | PAPER NUMBER |
|----------|--------------|

3679

DATE MAILED: 10/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/811,166

Applicant(s)

RICHTER ET AL.

Examiner

Aaron M. Dunwoody

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 July 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-13, 15-27 and 29-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13, 15-27 and 29-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 October 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Drawings***

The drawings are objected to because reference numbers cannot be shared between different figures, such as illustrated in Figures 15d and 15e. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 13.1. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any

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amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 9 and 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over US patent 4790574, Wagner et al in view of US patent 852997, Brandram.

In regards to claim 1, Wagner et al disclose a clamp for connecting a first end of a flexible tubing or pipe to a second end of a pipe, comprising:

a clamping band (72) configured to mate over the first and second ends;  
opposite-lying flange segments extending substantially radially outward from the clamping band, and

means for preventing tension from spreading (123) the clamping band, the spreading prevention means being disposed in a region proximate at least one of the

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opposite-lying flange segments, wherein the clamping band has two free ends defining a gap between the two free ends.

Wagner et al do not disclose a gap being saddled by a sliding crosspiece. Brandram teaches a gap being saddled by a sliding crosspiece (d) so that a considerable pressure is exerted upon the pipe ends to perfect a watertight joint (lines 37-46). As Brandram relates to joints for pipes, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a sliding crosspiece saddling a gap so that a considerable pressure is exerted upon the pipe ends to perfect a watertight joint, as taught by Brandram.

In regards to claim 9, Wagner et al disclose the spreading prevention means being a rotation lock for tightening the clamping band on the first and second ends.

In regards to claim 11, Wagner et al disclose a bolt having a polygon portion formed on the bolt, the polygon portion being accommodated by a correspondingly formed hole in the opposite-lying flange segments in a manner that prevents rotation of the bolt.

In regards to claim 12, Wagner et al disclose a nut (102) for attachment to the bolt, the nut having an undercut for accommodating a region of the polygon portion.

In regards to claim 13, Wagner et al disclose the spreading prevention mean being disposed on the opposite lying flange segments.

Claims 1, 2, 10, 13, 21 and 22-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over US patent 3944265, Hiemstra et al in view of Brandram.

In regards to claim 1, Hiemstra et al disclose a clamp for connecting a first end of a flexible tubing or pipe to a second end of a pipe, comprising:

- a clamping band (21) configured to mate over the first and second ends;
- opposite-lying flange segments extending substantially radially outward from the clamping band, and

- means for preventing tension from spreading (30) the clamping band, the spreading prevention means being disposed in a region proximate at least one of the opposite-lying flange segments, wherein the clamping band has two free ends defining a gap between the two free ends.

Hiemstra et al do not disclose a gap being saddled by a sliding crosspiece. Brandram teaches a gap being saddled by a sliding crosspiece (d) so that a considerable pressure is exerted upon the pipe ends to perfect a watertight joint (lines 37-46). As Brandram relates to joints for pipes, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a sliding crosspiece saddling a gap so that a considerable pressure is exerted upon the pipe ends to perfect a watertight joint, as taught by Brandram.

In regards to claim 2, Hiemstra et al disclose the region being an angle defined between band and the opposite-lying flange segments.

In regards to claim 10, Hiemstra et al disclose the opposite-lying flange segments having reinforcing plates (27).

In regards to claim 13, Hiemstra et al disclose the spreading prevention mean being disposed on the opposite lying flange segments.

In regards claim 21, Hiemstra et al disclose a sealing element (27) arranged between one the opposite-lying flange segments.

In regards claim 22, Hiemstra et al disclose the sealing element being strip-shaped.

In regards to claim 23, Hiemstra et al in view of Brandram disclose the claimed invention except for the sealing element having a round cross section. It would have been obvious to one having ordinary skill in the art at the time the invention was made to fabricate the sealing element with a round cross section, since a change in the shape of a prior art device is a design consideration within the skill of the art. In re Dailey, 357 F.2d 669, 149 USPQ 47 (CCPA 1966).

In regards to claim 24, Brandram discloses the sealing element being made of a material that is resistant to high temperature.

In regards to claim 25, Hiemstra et al in view of Brandram disclose the claimed invention except for the sealing element being made of glass fiber. It would have been obvious to one having ordinary skill in the art at the time the invention was made to fabricate the sealing element of glass fiber, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

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Claims 1, 3, 4, 13, 15-17 and 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over US patent 5131698, Calmettes et al in view of Brandram.

In regards to claim 1, Calmettes et al disclose a clamp for connecting a first end of a flexible tubing or pipe to a second end of a pipe, comprising:

a clamping band (1) configured to mate over the first and second ends;  
opposite-lying flange segments extending substantially radially outward from the clamping band, and

means for preventing tension from spreading (5) the clamping band, the spreading prevention means being disposed in a region proximate at least one of the opposite-lying flange segments, wherein the clamping band has two free ends defining a gap between the two free ends.

Calmettes et al do not disclose a gap being saddled by a sliding crosspiece. Brandram teaches a gap being saddled by a sliding crosspiece (d) so that a considerable pressure is exerted upon the pipe ends to perfect a watertight joint (lines 37-46). As Brandram relates to joints for pipes, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a sliding crosspiece saddling a gap so that a considerable pressure is exerted upon the pipe ends to perfect a watertight joint, as taught by Brandram.

In regards to claim 3, Calmettes et al disclose the spreading prevention means having at least one rib.

In regards to claim 4, Calmettes et al disclose the rib being a molded bead disposed at the region.

In regards to claim 13, Calmettes et al disclose the spreading prevention mean being disposed on the opposite lying flange segments.

In regards to claim 15, Calmettes et al disclose the sliding crosspiece being essentially square.

In regards to claim 16, Calmettes et al disclose the sliding crosspiece having a stepped impression.

In regards to claim 17, Calmettes et al disclose the stepped impression prior to assembly, extends only over a part a perimeter of the sliding crosspiece, and wherein the sliding crosspiece, prior to assembly, is essentially flat along a remaining part of the perimeter.

Note, a comparison of the recited process with the prior art processes does NOT serve to resolve the issue concerning patentability of the product. In re Fessman, 489 F2d 742, 180 U.S.P.Q. 324 (CCPA 1974). Whether a product is patentable depends on whether it is known in the art or it is obvious, and is not governed by whether the process by which it is made is patentable. In re Klug, 333 F2d 905, 142 U.S.P.Q. 161 (CCPA 1964). In an ex parte case, product-by-process claims are not construed as being limited to the product formed by the specific process recited. In re Hirao et al., 535 F2d 67, 190 U.S.P.Q. 15, see footnote 3 (CCPA 1976). Therefore, the limitations of the stepped impression prior to assembly, extends only over a part a perimeter of the sliding crosspiece, and wherein the sliding crosspiece, prior to assembly, is essentially flat along a remaining part of the perimeter is given little patentable weight.

In regards to claim 19, Calmettes et al disclose the sliding crosspiece being made of a high-strength material.

In regards to claim 20, Calmettes et al disclose the sliding crosspiece being made of a deformable material.

In regards to claim 21, Calmettes et al disclose a sealing element (8) arranged between one the opposite-lying flange segments.

Claims 1-3, 5-8, 13, 15-18 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over US patent 5383496, Bridges et al in view of Brandram.

In regards to claim 1, Bridges et al disclose a clamp for connecting a first end of a flexible tubing or pipe two a second end of a pipe, comprising:

- a clamping band (20) configured to mate over the first and second ends;
- opposite-lying flange segments (52, 54) extending substantially radially outward from the clamping band, and
- means for preventing tension from spreading (56) the clamping band, the spreading prevention means being disposed in a region proximate at least one of the opposite-lying flange segments, wherein the clamping band has two free ends defining a gap between the two free ends.

Bridges et al do not disclose a gap being saddled by a sliding crosspiece. Brandram teaches a gap being saddled by a sliding crosspiece (d) so that a considerable pressure is exerted upon the pipe ends to perfect a watertight joint (lines 37-46). As Brandram relates to joints for pipes, it would have been obvious to one

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having ordinary skill in the art at the time the invention was made to provide a sliding crosspiece saddling a gap so that a considerable pressure is exerted upon the pipe ends to perfect a watertight joint, as taught by Brandram.

In regards to claim 2, Bridges et al disclose the region being an angle defined between the clamping band and the opposite-lying flange segments.

In regards to claim 3, Bridges et al disclose the spreading prevention means having at least one rib.

In regards to claim 5, Bridges et al disclose the rib being an angle sheet iron.

In regards to claim 6, Bridges et al disclose the rib being arranged on an outer edge of the clamping band.

In regards to claim 7, Bridges et al disclose the rib being secured to the clamping band by a weld.

In regards to claim 8, Bridges et al disclose the spreading prevention means being a welded region for securing the opposite-lying, flange segments to the clamping band.

In regards to claim 13, Bridges et al disclose the spreading prevention mean being disposed on the opposite lying flange segments.

In regards to claim 15, Bridges et al disclose the sliding crosspiece being essentially square.

In regards to claim 16, Bridges et al disclose the sliding crosspiece having a stepped impression.

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In regards to claim 17, Bridges et al disclose the stepped impression prior to assembly, extends only over a part a perimeter of the sliding crosspiece, and wherein the sliding crosspiece, prior to assembly, is essentially flat along a remaining part of the perimeter.

Note, a comparison of the recited process with the prior art processes does NOT serve to resolve the issue concerning patentability of the product. In re Fessman, 489 F2d 742, 180 U.S.P.Q. 324 (CCPA 1974). Whether a product is patentable depends on whether it is known in the art or it is obvious, and is not governed by whether the process by which it is made is patentable. In re Klug, 333 F2d 905, 142 U.S.P.Q. 161 (CCPA 1964). In an ex parte case, product-by-process claims are not construed as being limited to the product formed by the specific process recited. In re Hirao et al., 535 F2d 67, 190 U.S.P.Q. 15, see footnote 3 (CCPA 1976). Therefore, the limitations of the stepped impression prior to assembly, extends only over a part a perimeter of the sliding crosspiece, and wherein the sliding crosspiece, prior to assembly, is essentially flat along a remaining part of the perimeter is given little patentable weight.

In regards to claim 18, Bridges et al disclose the sliding crosspiece having a thickness of 0.2 mm to 0.3 mm.

In regards to claim 20, Bridges et al disclose the sliding crosspiece being made of a deformable material.

Claims 1, 2, 8, 10, 13 and 30-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over US patent 4049298, Foti in view of Brandram.

In regards to claim 1, Foti discloses a clamp for connecting a first end of a flexible tubing or pipe to a second end of a pipe, comprising:

a clamping band (13, 54) configured to mate over the first and second ends;  
opposite-lying flange segments (21, 24, 59, 64) extending substantially radially outward from the clamping band, and

means for preventing tension from spreading the clamping band, the spreading prevention means being disposed in a region proximate at least one of the opposite-lying flange segments, wherein the clamping band has two free ends defining a gap between the two free ends.

Foti does not disclose a gap being saddled by a sliding crosspiece. Brandram teaches a gap being saddled by a sliding crosspiece (d) so that a considerable pressure is exerted upon the pipe ends to perfect a watertight joint (lines 37-46). As Brandram relates to joints for pipes, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a sliding crosspiece saddling a gap so that a considerable pressure is exerted upon the pipe ends to perfect a watertight joint, as taught by Brandram.

In regards to claim 2, Foti discloses the region being an angle defined between the clamping band and the opposite-lying flange segments.

In regards to claim 8, Foti discloses the spreading prevention means being a welded region for securing the opposite-lying flange segments to the clamping band.

In regards to claim 10, Foti discloses the opposite-lying flange segments being reinforcing plates (28, 30, 68, 70).

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In regards to claim 13, Foti discloses the spreading prevention mean being disposed on the opposite lying flange segments.

In regards to claim 30, Foti discloses the first and second ends having a butt jointed transition (13) having a continuously encircling ring arranged at the butt-jointed transition.

In regards to claim 31, Foti discloses the continuously encircling ring being a bead impressed into the clamping band.

In regards to claim 32, Foti in view of Brandram disclose the claimed invention except for the continuously encircling ring being of plastic or elastomeric material. It would have been obvious to one having ordinary skill in the art at the time the invention was made to fabricate the continuously encircling ring of plastic or elastomeric material, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

In regards to claim 33, Foti discloses comprising a plastic or highly elastic sealing material being employed on so the intersecting edges.

Claims 1, 13, 26, 27 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over US patent 5362107, Bridges in view of Brandram.

In regards to claim 1, Bridges discloses a clamp for connecting a first end of a flexible tubing or pipe to a second end of a pipe, comprising:

- a clamping band (50) configured to mate over the first and second ends;
- opposite-lying flange segments (53a,b) extending substantially radially outward from the clamping band, and

- means for preventing tension from spreading (57a,b) the clamping band, the spreading prevention means being disposed in a region proximate at least one of the opposite-lying flange segments, wherein the clamping band has two free ends defining a gap between the two free ends.

Bridges does not disclose a gap being saddled by a sliding crosspiece. Brandram teaches a gap being saddled by a sliding crosspiece (d) so that a considerable pressure is exerted upon the pipe ends to perfect a watertight joint (lines 37-46). As Brandram relates to joints for pipes, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a sliding crosspiece saddling a gap so that a considerable pressure is exerted upon the pipe ends to perfect a watertight joint, as taught by Brandram.

In regards to claim 13, Bridges discloses the spreading prevention mean being disposed on the opposite lying flange segments.

In regards to claim 26, Bridges discloses a saddle (11) covering the clamping gap of the first and second ends defined between the opposite-lying flange segments

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and a means for preventing leakage at intersecting edges of the saddle and the clamping band.

In regards to claim 27, Bridges discloses the means for preventing leakage being constructed as a labyrinth seal.

In regards to claim 29, Bridges discloses the means for preventing leakage being a plastically or elastically deformable sealing material arranged along the intersecting edges.

### ***Response to Arguments***

Applicant's arguments with respect to claims above have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

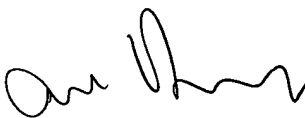
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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aaron M. Dunwoody whose telephone number is 571-272-7080. The examiner can normally be reached on 7:30 am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on 571-272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Aaron M Dunwoody  
Primary Examiner  
Art Unit 3679

.amd